

**Reply under 37 CFR 1.116 -
EXPEDITED PROCEDURE -
Technology Center 3739**

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/509,377	08/28/2000	Sergey Matasov		9553

United States Patent and Trademark Office
Commissioner for Patents
Art Unit 3739
Examiner Mr. Leubecker, John P.
P.O. Box 1450, Alexandria VA 22313-1450
United States of America

EXAMINER	
LEUBECKER, JOHN P	
ART UNIT	PAPER NUMBER
3739	

DATE MAILED: September 1, 2004
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Mr. Leubecker,

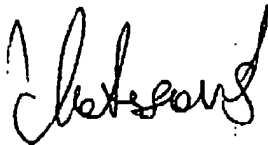
Please, find attached the applicant's response to Office Action of June 3, 2004 concerning this application on 6 sheets.

Enclosures to Applicant's reply:

- | | |
|---|-----------|
| 1. Copy of Applicant's Communication dated September 3, 2003
in reply to the Office Action of June 9, 2003 | 28 sheets |
| 2. Postal advice of reception by USPTO of said Applicant's Communication | 1 sheet |
| 3. Confirmation of fax transmission to USPTO of said Applicant's Communication | 1 sheet |
| 4. Substitute specification and claims of the application 09/509,377 | 15 sheets |
| 5. Copy of the USPTO Notice of Non-Compliant Amendment of Dec. 23, 2003 | 2 sheets |
| 6. Copy of the Rospatent communication concerning the unpublication of SU 1522466 | 1 sheet |
| 7. The verified English translation of said Rospatent communication | 1 sheet |
| 8. Statement of amendments | 1 sheet |
| 9. Remarks/Arguments | 1 sheet |
| 10. Version with markings to show changes made | 17 sheets |
| 11. Drawing 5/5 | 1 sheet |
| 12. Table „Localization of amended claims support in the materials of the present application“ | 3 sheets |

Faithfully Yours,

Dr. Sergey Matasov



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According to last Office Action Summary, „Status“, item 1.

Examiner did not reply on the Communication filed on September 3, 2003 (see Enclosure 1), wherein my arguments were contained. Please, note that this Communication was sent in USPTO both by post (see Enclosure 2) and by fax (see Enclosure 3).

According to last Office Action, numbered paragraph 1.

Reference to Inventor's Certificate SU 1522466 in the first paragraph of the specification is withdrawn (see the amended specification in Enclosure 4).

According to last Office Action, numbered paragraph 2.

Concerning the amendment to the specification.

The amendments to the specification on page 3, line 12 filed on February 13, 2003 and September 3, 2003, are withdrawn.

Concerning the USPTO Notice of Non-Compliant Amendment of December 23, 2003.

Communication filed on September 3, 2003 was accompanied both with „Amendments to the claims“ and with „Amendments to the specification“. The Office communication of December 23, 2003 required the correction and re-submission of the „Amendments to the claims“ section only (see Enclosure 5). In this connection on January 19, 2004 I have filed only the corrected „Amendments to the claims“ section.

According to last Office Action, numbered paragraph 3.

The specification is properly corrected.

According to last Office Action, numbered paragraph 4.

The mentioned claims are properly corrected and amended.

According to last Office Action, numbered paragraph 6.

- o The claims 3 and 8 are withdrawn.
- o The claims 5, 7 and 11 are amended.

According to last Office Action, numbered paragraph 8.

- o The grammatical errors are corrected.
- o The claim 7 describes the seal (13), but the claim 9 – the seal (29).
- o The claim 19 is dependent from the preceding one – 18th. The erroneous reference is corrected.

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According to last Office Action, numbered paragraph 10.

Claims 1-8, 10, 12, 14 and 20 are rejected „under 35 U.S.C. 102(b) as being anticipated by *Matasov*”. In the previous Office Action of June 9, 2003 (paper number 20), on which refers Examiner, there was asserted: „Applicant's inventor's certificate, which was published on July 15, 1989, is prior art with respect to this application” (page 3, lines 1-2).

Here are the arguments of groundlessness of this position:

- o On the title-page of inventor's certificate SU 1522466 the date July 15, 1989 is present, but this date relates to the following inscription: „Registered in the USSR State Register of inventions”. As is known, the registration of invention in the Register does not mean its print publication.
- o The assertion about the publication of inventor's certificate SU 1522466 on July 15, 1989 is finally disproved by the Communication from the Federal Institute of Industrial Property of Russian Federation (Rospatent) (see Enclosure 6).
- o The first disclosure of the subject matter of SU 1522466 took place on October 3, 1997 in the patent application P-97-190 (LV).
- o The first publication of the subject matter of SU 1522466 took place on April 15, 1999 in the WO 99/17655.
- o The first printed publication as a document itself of inventor's certificate SU 1522466 occurs only on March 31, 2003 in Online Public File Inspection EPOLINE (www.epoline.org). If there is known the other date, I kindly ask to indicate, where is possible to acquaint myself with it. According to MPEP 2128 „A reference is a „printed publication” if it is accessible to the public”.
- o The inventor's certificate SU 1522466 as a document was included into the set of documents at filing of the application No. 09/509,377.

The claim 20 is amended. But at the same time in said application there is no support to Examiner's opinion that „the pressurized everting tube forms a „mechanism for introduction of an endoscopic tube which is a cylinder/piston unit connected to the pressure of gas or liquid”.

According to last Office Action, numbered paragraph 11.

Claims 1-8, 12 and 20 are rejected „under 35 U.S.C. 102(b) as being anticipated by Bob et al. (U.S. Pat. 5,259,364) for the reasons set forth in numbered paragraph 12 of the previous Office Action, paper number 20”.

In the numbered paragraph 12 of paper number 20 Examiner asserted: „As shown in Figure 2, the invaginator (24) would be gathered on the distal end (as the endoscope tube enters the anus (30)) by pleats (52) (col.5, lines 7-9)”.

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The assertion about location of invaginator on the distal end of endoscope has no support in U.S. Pat. 5,259,364:

- o In Figure 2 there is no endoscope's distal end (38) at all, at the same time the distal (relatively to anus (30)) part (2) of tube is represented without „pleats (52)“.
- o In Figure 2 there is shown that the slit between means (70) and roller pairs (72) under no circumstances will not pass „pleats (52)“ „on the distal end“ of endoscope.
- o Also in Figure 1 there is no any „pleats (52)“ on the distal end of tube (2).
- o The extract cited by Examiner had no connection with the „gathering of invaginator (24)“ and with the „pleats (52)“. Please, note that the U.S. Pat. 5,259,364 does not contain any data about gathering of „invaginator (24)“ at all.

In the U.S. Pat. 5,259,364 there is unambiguously stated:

- o *“supply portion is disposed in a pressure chamber”* (claim 4).
- o *“The rearward, in FIG. 2 lower end of the supply portion 52 is attached to the rear wall of pressure chamber 50.”* (col. 5, lines 7-9).

These citations demonstrate the fundamental differences between compared invaginators:

- o the supply portion (52) of invaginator according to U.S. Pat. 5,259,364 is disposed in the chamber (50) and is attached to it
- o the invaginator (23) according to the present application is attached to the endoscope tube (3) and is disposed on it

These differences give the following results:

- o the supply portion (52) of invaginator according to U.S. Pat. 5,259,364 is always located in the chamber (50).
- o the invaginator (23) according to present application moves into the colon on the distal part of endoscope tube (3).

In the numbered paragraph 12 of paper number 20 there was asserted: *“As to claims 2, 3 and 8, pleats (52) form a compact hollow cylinder which defines a gap (note a space between pleats and endoscope tube in Figure 2), that is maintained under working pressure (col.5, lines 18-22)”*.

On the Figure 2, proposed by Examiner, the space (68 and 44) is formed solely by fluid pressure, and in the U.S. Pat. 5,259,364 on col.3, lines 30-36 is said: *“It is possible to apply fluid pressure to the annular space between the inner portion of the hollow member and the endoscope tube during introduction. Frictional engagement with an undesirably high pressing force between the inner portion of the hollow member and the outer circumference of the endoscope tube can be avoided in this manner”*.

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Examiner mistakenly considered that the present application also comprises a „fluid“ solution of the problem of „frictional engagement“.

- o „working pressure maintains gap 25“ (Office Action of November 20, 2002);
- o „the working pressure is applied to gap 25“ (Office Action of June 9, 2003, paragraph 4 (b)).

There is no any support to these assertions: the seal (29) insulates the gap (25) from the cavity (14) with working pressure (see English translation of WO 99/17655, page 5 lines 11-12).

My solution of the problem of „frictional engagement“ – Invaginator (23) in the shape of a compact hollow cylinder having a gap (25) with endoscope tube (3), the cylinder *“is formed of a crumpled and tightly compressed in longitudinal and transverse directions short layers of different forms of an eversible thin-walled tube placed at different angles with the longitudinal axis of an endoscopic tube”* (see English translation of WO 99/17655, page 3 lines 23-26).

In the U.S. Pat. 5,259,364 there is not a word about compact cylinder with a gap:

- o there are no terms „compact“, „cylinder“, „formed“ and word-combinations „compact cylinder“, „compact hollow cylinder“;
- o there are no analogues to Examiner's phrase „pleats (52) form a compact hollow cylinder“;
- o there are no analogues to Examiner's assertion that „cylinder... define a gap“;
- o the supply portion (52) on the Figure 2, indicated by Examiner, is represented by a wavy line. Hollow cylinders are represented by straight lines – see, for example, the invaginator (23) on Figures 1c, 1e, 1f of the present application.

Thus:

- o In the U.S. Pat. 5,259,364 the space (68, 44) is formed by fluid pressure.
- o In the present application the gap (25) is ensured by molding (forming) of eversible tube.

In the numbered paragraph 12 of paper number 20 there was asserted: „As to claim 4, the distal end (38) of the endoscope tube encloses a camera and is thus inherently sealed“.

In the claim 4 mentioned by Examiner, concerns the separate removable element – the seal (29) between an endoscope tube and unverted end of invaginator. In the amended Claims about this seal is said in claim 6.

In the numbered paragraph 12 of paper number 20 there is a note: „As to claim 5, note shell (50).“

Please, note that the pressure chamber (50) according to the U.S. Pat. 5,259,364 neither by construction nor by functionally have nothing common with the shell (22) according to the present application:

- o in the chamber (50) the means (70, 72) are disposed,

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The tip (8) according to the present application together with the protective glass (33) is removable, separate from endoscope tube (3) as hat from head, disposable element.

According to last Office Action, numbered paragraph 11:

In numbered paragraph 11 is asserted: *„As to claim 20, the pressurized everting tube forms a „mechanism for introduction of an endoscopic tube which is a cylinder/piston unit connected to the pressure of gas or liquid“*.

The claim 20 is amended. However the opinion that invaginator forms a cylinder/piston unit does not have support in the specification of the present application.

According to last Office Action, numbered paragraph 13.

The claim 16 is rejected *„under 35 U.S.C. 103(a) as being unpatentable over Matasov (SU 1522466) in view of Wilk et al. (U.S. Pat. 5,396,879) and further as being unpatentable over Bob et al. in view of Wilk et al. for the reasons set forth “*.

The rejection of claim 16 over SU 1522466 in view of U.S. Pat. 5,396,879 is invalid as SU 1522466 is the component part of the present application – see the reply according to the paragraph 10.

The rejection of claim 16 over U.S. Pat. 5,259,364 in view of U.S. Pat. 5,396,879 is invalid as U.S. Pat. 5,259,364 has no common features with claims 1, 2, 3, 7, 8 of the Claims filed on September 3, 2003.

According to last Office Action, numbered paragraph 14.

Examiner asserts, that applicant provided no arguments. It is not the case. About the Communication of September 3, 2003 (see Enclosure 1), where my arguments were cited, Examiner for some reason does not mention in his action of June 3, 2004. Please, note that this Communication was sent in USPTO both by post (see Enclosure 2) and by fax (see Enclosure 3).

In order to make easier Examiner's work, herewith is enclosed the table of support for the amended claims (see Enclosure 12).

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Total : 28 sheets
 Originals are sent by mail
 on Sept. 13, 2003.

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09/509,377	08/28/2000	Sergey Matasov		9533

United States Patent and Trademark Office
 Commissioner for Patents
 Art Unit 3739
 Examiner Mr. Leubecker, John P.
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LEUBECKER, JOHN P	
ART UNIT	PAPER NUMBER

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DATE MAILED: September 3, 2003

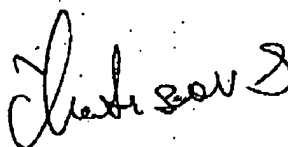
Please, find attached the reply on the Office Action of June 9, 2003 concerning this application.

Enclosed:

1. Copy and certified English translation of the Official Bulletin of the State Committee of Inventions and Discoveries at the USSR SCST No. 42 from November 15, 1989 4 sheets
2. Corrected drawing 4/4 3 copies
3. Substitute specification and claims of the application 09/509,377:
 - amended page 3 1 sheet
 - amended page 9 1 sheet
4. Statement of amendments 2 sheets
5. Remarks/Arguments 1 sheet
6. Version with markings to show changes made 2 sheets

Faithfully Yours,

Sergey Matasov, M.D.



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According to item 1.

Thank You for the advice. I have consulted the US registered patent attorney and the European patent attorney. They affirm, that the main problem is in the infringement of 35 U.S.C. 102 (b) at granting of US Patent 6,485,409 (Voloshin et al.).

According to item 2.

Subject of discussion:	Examiner on June 9, 2003:	Applicant on September 3, 2003:
Status of the SU Inventor's Certificate No.1522466.	"... Applicant's inventor's certificate, which was published on July 15, 1989, is prior art with respect to this application".	<p>The statement of Examiner about publication of SU Inventors Certificate No. 1522466 on July 15, 1989 does not square with reality.</p> <p>In reality:</p> <ul style="list-style-type: none"> On February 13, 2003 Examiner received the certificated copy and the English translation of SU Inventors Certificate No. 1522466, which has a stamp "For office use only". In the Official Bulletin of the State Committee of Inventions and Discoveries at the USSR State Committee of Science and Engineering No. 42 from November 15, 1989 is said, that the inventors certificates from No. 1522442 till No. 1523037 are not to be published (see Enclosure No.1). The SU Inventors Certificate No. 1522466 was published after October 3, 1997 (see PCT Gazette 15/1999 from April 15, 1999, publication WO99/17655) and therefore is not prior art, but the component part of this application.

According to item 3.

Thank You for the approval of proposed drawing. Corrected drawing is enclosed (see Enclosure No.2)

According to item 4 (a).

Thank You for the observation. The dot is applied. The newly added sentences on page-3 are amended (see Enclosure No. 3).

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According to items 4 (a) and (b). (Repeatedly, for the first time in my letter from February 13, 2003).

Subject of discussion:	Examiner:	Applicant on September 3, 2003:
Examiner's statement concerning the including in the specification of new subject matter: "the working pressure is applied to gap 25".	<ul style="list-style-type: none"> • "the working pressure keep the gap 25" (Office Action from November 20, 2002) • "working pressure is applied to gap 25" (Office Action from June 9, 2003) • "the newly added sentences on page 3 ... are indefinite as to meaning" (Office Action from June 9, 2003) 	<p>The statements of Examiner "the working pressure keeps the gap 25" and "the working pressure applied to gap 25" do not square with reality.</p> <p>In reality:</p> <ul style="list-style-type: none"> • In my application on page 3 and page 5 there is no and could not be the statement of Examiner. • Examiner has at first distorted ("the working pressure keeps the gap 25", "the working pressure applied to gap 25") the subject matter of claim 3 (8), and then begin to allege, that this (distorted) subject matter was not in the specification as originally filed. • The working pressure exerts influence upon all the elements, which are limiting its cavity and, as a result, presses the uneverted part of invaginator to the endoscopic tube. The problem of gap's maintaining exists for all the endoscopes, comprising an invaginator (see page 1, lines 12-15, 36-40 of the application PCT/LV98/00006). • US Patent 5,259,364 (Bob et al.) declares the maintaining of gap by means of pressure. The pressure is forced simultaneously into two cavities: into the chamber (42) of the everted part of invaginator and into the gap space (44) between the invaginator (32) and endoscopic tube (2). • In my application the working pressure is introduced only into one cavity (14). • In my application the working pressure into the gap (25) - that is the cavity between invaginator and endoscopic tube - is not feeded. It is inadmissible. The gap (25) is kept by the invaginator formed in a hollow cylinder (23), which has a definite compactness. The working pressure in cavity (14) is not able to grasp the compact cylinder (23), in other words - to

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		<p>liquidate its gap (25) with the endoscopic tube (3).</p> <ul style="list-style-type: none"> • The real subject matter of claims 3 and 8 was fully and clearly described in the application at the time it was filed. Please note the application PCT/LV98/00006: • page 3 lines 18-19 and 23-26; • page 5 lines 7-9; • page 7 lines 38-40; • page 9 lines 11-13; • page 10 lines 1-3; • Fig. 1 c, 1 e, 1 f; • Abstract, lines 2, 3.
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Herewith I propose the correction of lines 15-19 on page 3, where the mentioning of pressure is excluded:
The stability of diameters depends on the compactness of the cylinder. In one of the embodiments the definite compactness of cylinder ensures the gap with endoscopic tube during their joining and in the process of invagination, in the other – only during the joining. There are possible also the interim variants of embodiments.

According to item 5.

Concerning claim 1. The amended claim looks like as follows:

1. *An endoscope, comprising an invaginator which is a thin-walled tube, compactly placed on the distal part of an endoscopic tube in the shape of small layers and/or pleats.*

Concerning claim 2. The amended claim looks like as follows:

2. *The endoscope according to claim 1, wherein said invaginator is formed in the shape of a compact hollow cylinder, which has a gap with the distal part of the endoscopic tube.*

Concerning claims 3, 5, 7, 8, 10, 16 and 17. Thank You for the proposals. They are accepted.

According to item 7. (Repeatedly, for the first time in my letter from February 13, 2003).

Subject of discussion:	Examiner on June 9, 2003:	Applicant on September 3, 2003:
Claims 3 and 8 and description of their subject matter in the specification.	<i>"Claims contains subject matter which was not described in the specification in</i>	<p>The statements of Examiner "the working pressure keeps the gap 25" and "the working pressure applied to gap 25" do not square with reality.</p> <p>In reality:</p> <ul style="list-style-type: none"> • Examiner has at first distorted ("the working pressure keeps

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	such a way ... "	<p>the gap 25", "the working pressure applied to gap 25") the subject matter of claim 3 (8), and then begin to allege, that this (distorted) subject matter was not described in the specification in comply with the 35 U.S.C. 112, first paragraph.</p> <ul style="list-style-type: none"> • In my application there is no and could not be the description of subject matter, distorted by Examiner. • The working pressure, which exerts influence upon all the elements limiting its cavity, presses the uneverted part of invaginator to the endoscopic tube. This problem is typical for all the endoscopes, comprising an invaginator (see page 1, lines 12-15, 38-41 of the application PCT/LV98/00006). • US Patent 5,259,364 (Bob et al.) declares the solving of this problem by means of pressure, which is forced not only into the chamber (42) of the everted part (26) of invaginator, but also into the gap space (44) between the invaginator (32) and endoscopic tube (2). • In my application the working pressure into the cavity (25) is not feeded. It is inadmissible. The gap (25) is kept by the invaginator formed in a hollow cylinder (23), which has a definite compactness. The working pressure in cavity (14) is not able to grasp the compact cylinder (23), in other words - to liquidate its gap (25) with the endoscopic tube (3). • In my application the real subject matter of claims 3 and 8 was fully and clearly described in the application at the time it was filed. Please note the application PCT/LV98/00006: <ul style="list-style-type: none"> • page 3 lines 18-19 and 23-26; • page 5 lines 7-9; • page 7 lines 38-40; • page 9 lines 11-13; • page 10 lines 1-3; • Fig. 1 c, 1 e, 1 f; • Abstract, lines 2, 3.
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Herewith I propose the correction of lines 15-19 on page 3, where the mentioning of pressure is excluded:
The stability of diameters depends on the compactness of the cylinder. In one of the embodiments the definite compactness of cylinder ensures the gap with endoscopic tube during their joining and in the process of invagination, in the other – only during the joining. There are possible also the interim variants of embodiments.

According to item 2. Thank You for the observations. They are accepted.

Concerning claim 3. The amended claim looks like as follows:

3. *The endoscope according to claim 2, wherein said cylinder has a compactness, which ensures said gap in the process of invagination of the endoscopic tube.*

Concerning claim 8. The amended claim looks like as follows:

8. *The endoscope according to claim 7, wherein said cylinder has a compactness, which ensures said gap in the process of invagination of the endoscopic tube.*

Concerning claim 13. The amended claim looks like as follows:

13. *The endoscope according to claim 12, wherein a cavity of said tip communicates with a cavity of intestines.*

Concerning claim 15. The claim 15 is withdrawn.

Concerning claim 16. Thank You for the observation. The amended claim looks like as follows:

- *The endoscope according to any of claims 1, 2, 3, 7, 8, wherein the endoscopic tube further comprises a distal drives of traction lines, bending its distal end, which are cylinder-piston units, connected to the pressure of gas or liquid.*

Concerning claim 17. The claim 17 is withdrawn.

Concerning claim 18. The subject matters of this claim are following:

1. *the biopsy forceps, which are the flexible hermetic tube,*
2. *the piston of biopsy channel, which is placed on the distal end of the flexible hermetic tube.*

These subject matters are illustrated on Fig. 4d under the numbers 63-68 and described in the specification on:

- page 4, lines 13-16;
- page 5, lines 28-30;
- page 6, lines 38-43;
- page 8, lines 17-22.

Concerning claim 19. Thank you for the observation. The amended claim looks like as follows:

- *The endoscope according to claim 16, further comprising a distal drive of traction line of a cutters of said biopsy forceps.*

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According to item 11.

Subject of discussion:	Examiner on June 9, 2003:	Applicant on September 3, 2003:
The status of SU Inventors Certificate No.1522466.	<i>"Claims 1, 2, 4-7, 9-12, 14 and 20 are rejected under 35 USC 102 (b) as being anticipated by Matasov"</i>	<p>The statement about publication of SU Inventors Certificate No. 1522466 on July 15, 1989 does not square with reality.</p> <p>In reality:</p> <ul style="list-style-type: none"> On February 13, 2003 Examiner received the certificated copy and the English translation of SU Inventors Certificate No. 1522466, which has a stamp "For office use only". In the Official Bulletin of the State Committee of Inventions and Discoveries at the USSR State Committee of Science and Engineering No. 42 from November 15, 1989 is said that the inventors certificates from No. 1522442 till No. 1523037 are not to be published (see Enclosure No.1). The SU Inventors Certificate No. 1522466 was published after October 3, 1997 (see PCT Gazette 15/1999 from April 15, 1999, publication WO99/17655) and therefore is not prior art, but the component part of this application. Examiner has greatly distorted the contents of the SU Inventors Certificate No. 1522466, but its status (as the component part of my application) excludes the necessity of discussion.

According to item 12. (Repeatedly, for the first time in my letter from February 13, 2003).

Examiner has rejected the claims 1-9, 11, 12 and 20 under 35 USC § 102 (b), as being anticipated by Bob et al. (U.S. Pat. 5,259,364).

Herewith I repeatedly adduce the proofs, that the subject matters of claims 1-9, 11, 12 and 20 (from February 13, 2003) of my application have not any common features with U.S. Pat. 5,259,364 (Bob et al.).

Subject of discussion:	Examiner on June 9, 2003:	Applicant on September 3, 2003:
Examiner's statement, that	<i>" As shown on Figure 2, the</i>	The statement of Examiner, that the invaginator according to US Patent 5,259,364. (Bob et al.) "would be gathered on the distal

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the invaginator according the US Patent 5,259,364 "would be gathered on the distal end".	invaginator (24) would be gathered on the distal end (as the endoscope tube enters the anus 30) by pleats (52) (col.5, lines 7-9)".	<p>end" do not square with reality.</p> <p>In reality:</p> <ul style="list-style-type: none"> About the location of the "distal end" of endoscope one should judge by its objective. In the US Patent 5,259,364 on the Figure 2, mentioned by Examiner, there is no "distal end" of endoscope. In the US Patent 5,259,364 on the Figure 2 are shown: <ul style="list-style-type: none"> The distal part of the endoscopic tube (2). There are no any "pleats 52" on it. The proximal part of the endoscopic tube (2) with "pleats (52)". In the US Patent 5,259,364 on the Figure 1 are shown: <ul style="list-style-type: none"> the "distal end" of the endoscopic tube (2), that is the head piece (38), which includes the objective, the distal part of the endoscopic tube (2), that is the section above the break, the proximal part of the endoscopic tube (2), that is the section below the break. In the US Patent 5,259,364 on the Figure 1 there is no "pleats (52)": <ul style="list-style-type: none"> on the "distal end", mentioned by Examiner, on the distal part of the endoscopic tube (2), on the proximal part of the endoscopic tube (2). In the US Patent 5,259,364 in column 5, lines 7-9 there is no the statement of Examiner, that "the invaginator would be gathered on the distal end ...". In the US Patent 5,259,364 in column 5, lines 9-11 is said: "The rearward, in FIG.2 lower end of the supply portion 52 is attached to the rear wall of pressure chamber 50". Thus, the supply or storage portion (52) of the invaginator is always located in the chamber (50), i.e. on the proximal part of the endoscopic tube (2).
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		<ul style="list-style-type: none"> In my application, in contrast to the US Patent 5,259,364, the unverted end (7) of the cylinder of invaginator (23) is joined with the seal (29) on the distal part of the endoscopic tube (3). That is why the 1,5-meters long store of invaginator (23) is always located on the distal part of the endoscopic tube (3) and is moving together with it.
<p>Examiner's statement, that the invaginator according the US Patent 5,259,364 "defines a gap...".</p>	<p>"As to claims 2, 3 and 8, pleats (52) form a compact hollow cylinder which defines a gap (note space between pleats and endoscope tube in Figure 2) that is maintained under working pressure (col. 5, lines 18-22)."</p>	<p>The statement of Examiner, that in US Patent 5,259,364 (Bob et al.) "pleats (52) form a compact hollow cylinder which defines a gap..." do not square with reality.</p> <p>In reality:</p> <ul style="list-style-type: none"> In US Patent 5,259,364 (see Figure 2) invaginator under the number (52) is represented by the wavy lines. The hollow cylinders are usually represented by straight lines. In US Patent 5,259,364 there are no words "cylinder", "compact", word-combinations "compact cylinder" "compact hollow cylinder" or their synonyms. In US Patent 5,259,364 on Figure 2 there is represented the portion (68) of the pressure chamber (50), limited by the invaginator (52) and the endoscopic tube (2). The presence of a gap between them is ensured not by the compactness of the portion (52), but by the pressure which is feeding in the portion (68) of pressure chamber (50). This pressure must be equal to the pressure in the portion (62) of pressure chamber (50). In US Patent 5,259,364 in case of prevalence of pressure in the portion (62) of pressure chamber (50) over the pressure in the portion (68) of pressure chamber (50), the supply portion (52) of invaginator will adhere to the endoscopic tube (2). In US Patent 5,259,364 in case of prevalence of pressure in the portion (68) of pressure chamber (50) over the pressure in the

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		<p>supply portion (52) of invaginator and the endoscopic tube (2) will appear, but invaginator (24) will adhere to the outer portion (26).</p> <ul style="list-style-type: none"> In US Patent 5,259,364 in the indicated col. 5, lines 18-22 there is no the statement of Examiner - there is said that the pressurized fluid can be supplied into the portion (68) of the pressure chamber (50). In US Patent 5,259,364 the working pressure arrives into the portion (68), then into the gap space (44) and then inevitably gets into the intestine (14). The value of working pressure is 0,35 bar. The obvious threat of intestines ruptures by this pressure excludes its use outside the closed cavity. In my application for formation of compact hollow cylinder (23) from a thin-wall tube the press-mold and high temperature are used (see my letter from February 13, 2003). Formation of the gap (25) is ensured by the die, which diameter exceeds the diameter of the distal part of endoscopic tube (3). By the compactness the hollow cylinder (23) resembles the cigar.
Formulating of claim 4.	<p><i>"As to claim 4, the distal end (38) of the endoscope tube encloses a camera and is thus inherently sealed."</i></p>	<ul style="list-style-type: none"> In US Patent 5,259,364 the camera chip is installed into the head piece (38). In my application claim 4 declares the movable seal (29) between the endoscopic tube (3) and the movable unevverted end (7) of the invaginator (23). I thank You for the constructive observation and propose the amended claim 4: <p>4. The endoscope according to any of claims 1 to 3, further comprising a seal between the endoscopic tube and the unevverted end of said invaginator.</p>

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Novelty of claim 5.	<i>"As to claim 5, note shell (50)."</i>	<ul style="list-style-type: none"> • In my application, due to the internal transverse pleats (48) of the external cover of endoscopic tube (3), as well as due to the widenings and narrowings (24) of the diameters of cylinder (23), the distal part of endoscope becomes extremely flexible. • In my application the conducting of endoscope with extremely flexible distal part along the rectum (which has a form of ampoule with diameter till 8 cm) into the sigmoid intestine is ensured by the shell (22) (see Fig. 1b, 1c; page 5 lines 38-39). • In my application the shell (22) serves as a sheath-conductor of invaginator (23) and of the distal part of endoscopic tube (3) along the rectum. • In US Patent 5,259,364 there is no neither constructional, nor functional analogue of the shell (22). The object (50) is an out-organ container for the placing of: <ul style="list-style-type: none"> • means (70), • roller pairs (72), • annular seal (58), • supply portion (52) of invaginator. • In US Patent 5,259,364 the pressure chamber (50) is not intended for the insertion into rectum. <p>I propose the amended claim 5:</p> <p><i>5. The endoscope according to any of claims 1 to 3, further comprising a shell of said invaginator, commensurate to the diameter of said invaginator and to the length of rectum.</i></p>
The main point of the term <i>preservative</i> in claim 6 and part of claim 7.	<i>"As to claims 6 and 7, endoscopic tube (2) inherently comprises an outer protective</i>	<ul style="list-style-type: none"> • The preservative is the removable object by its definition. • In my application claims 6 and 7 declares the separate from the endoscopic tube (3) subject matter - the distal preservative (26) (see Figure 1c, 1f; page 7 line 23; page 3 lines 23-25).

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	<i>sheath which meets the limitation of a preservative."</i>	<ul style="list-style-type: none"> • In my application removable preservative (26) isolates the "outer protective sheath" of the endoscopic tube (3), which one was opposed by Examiner to the preservative (26). • In my application the preservative (26) "protect the patient from infections seated in endoscopic tube 3, but tube 3 - from getting contagious during endoscopy." (page 6, lines 27-29). Preservative (26), in combination with others elements, allows repeatedly use the endoscopic tube (3) without disinfection. • In US Patent 5,259,364 there is no preservative of the distal part of endoscopic tube (2).
Novelty of claim 9.	<i>"As to claim 9, note seal (58)."</i>	<ul style="list-style-type: none"> • In US Patent 5,259,364 the seal (58) pressurizes the cavity of uneverted part of invaginator. • In my application seal (13) pressurizes the cavity of everted part of invaginator.
The main point of the term <i>tip</i> and novelty of claim 11.	<i>"As to claim 11, note tip (38)."</i>	<ul style="list-style-type: none"> • The tip, as well as the preservative, is removable object by its definition, for example, the tip of fountain-pen. • In US Patent 5,259,364 the <i>head piece</i> (38) inheres in the tube (2) as a head in a body. • In my application is claimed the tip (6), which, following the preceding analogue, is the "hat" of the head of endoscopic tube (3). • In my application the ability to remove the tip (6) is confirmed by its belonging to the disposable cartridge (see Figures 1c, 1f, page 3, lines 24-25, page 5 lines 8-10).
The main point of the term <i>tip</i> and novelty of claim 12.	<i>"As to claim 12, a protective glass is inherent since a camera for viewing is located in the tip (38)."</i>	<ul style="list-style-type: none"> • The tip, comprising the glass, is removable object by its definition. • In US Patent 5,259,364 there is no tip of endoscopic tube (2). • In US Patent 5,259,364 the <i>head piece</i> (38) is not removable. • In my application in claim 11 is claimed the removable tip (6) of the endoscopic tube (3). • In my application in claim 12 is claimed the removable tip (6) according to claim 11 with the protective glass (33).

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		<p>The removable tip (6) with glass (33) according to claim 12 is illustrated on Figure 1f and described on page 3, lines 27-28; page 6, line 38; page 7, line 30).</p> <p>At the same time, taking into account the plurality of variants of interpretations of the term <i>tip</i>, herewith I propose the amended claim 11:</p> <p><i>11. The endoscope according to any of claims 1, 2, 3, 7, 8, further comprising a removable tip of the endoscopic tube.</i></p>
Formulating of claim 20.	<p>"As to claim 20, the invaginator (24) is cylindrical (i.e. shape of a cylinder/piston unit)."</p>	<ul style="list-style-type: none"> • There is known very many cylindrical objects. Under the cylinder-piston unit is known the concrete construction, which include two inherent elements - cylinder and its hermetic piston. The pressure, which is feeding into cylinder, realizes the job of lineal displacement of piston or cylinder. • In the US Patent 5,259,364 on Fig 1 and 2 the cylindrical invaginator (24) has no piston. • In the US Patent 5,259,364 is not said, that the cylindrical invaginator (24) is the part of cylinder-piston unit. <p>I thank You for the constructive opposition, the amended claim looks like as follows:</p> <ul style="list-style-type: none"> • <i>An endoscope comprising a mechanism for introduction of an endoscopic tube, which is a cylinder-piston unit, connected to the pressure of gas or liquid.</i>

According to item 14.

Subject of discussion:	Examiner on June 9, 2003:	Applicant on September 3, 2003:
Novelty of claim 16.	<p>"Claim 16 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Matasov (SU 1522466) in view of Wilk et</p>	<ul style="list-style-type: none"> • The SU Inventors Certificate No. 1522466 was published after October 3, 1997 (see PCT Gazette 15/1999 from April 15, 1999, publication WO99/17655) and therefore is not prior art, but the component part of my application. • Thus, SU Inventors Certificate No. 1522466 in view of U.S. Pat. 5,396,879 can not discredit the novelty of my invention.

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	<p><i>al. (U.S. Pat. 5,396,879)</i></p> <p><i>and further as being unpatentable over Bob et al. in view of Wilk et al."</i></p>	<ul style="list-style-type: none"> • In my application for bending of distal end of the endoscopic tube (3), which repeats the colon curves, there are described the distal drives of traction lines in the shape of classical cylinder-piston unit (claim 16). • Under the cylinder-piston unit is known the classic construction, which includes two inherent elements - cylinder and its hermetic piston. The pressure of fluid, which is feeding into cylinder, realizes the job of lineal displacement of piston or cylinder. • In the U.S.Pat. 5,396,879 is described the distal drive on the base of solenoid, whose tiny force could not ensure the bending of distal end of endoscopic tube (3), which repeats the colon curves. • U.S.Pat. 5,259,364 in view of U.S.Pat. 5,396,879 could not serve as the prior art, because not one from these patents do not include not one of the subject matters of claims of my application. <p>I thank You for the observation, the amended claim looks like as follows:</p> <ul style="list-style-type: none"> • <i>The endoscope according to any of claims 1, 2, 3, 7, 8, wherein the endoscopic tube further comprises a distal drives of a traction lines, bending its distal end, which are cylinder-piston units, connected to the pressure of gas or liquid.</i>
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According to item 15.

The claim 17 is withdrawn from Claims.

According to item 16.

Examiner asserts, that "Applicant relies heavily on disclosed subject matter".

In this connection I kindly ask to draw the attention, that all three Examiner's statements, concerning the claims 1, 2 and 3, do not square with reality. They are as follows:

1. Statement, that the invaginator according to US Patent 5,259,364 (Bob et al.) "would be gathered on the distal end" of endoscopic tube.

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2. Statement, that in US Patent 5,259,364 "pleats (52) form a compact hollow cylinder which defines a gap".
3. Statements, that in my application "the working pressure keeps the gap 25" and "the working pressure applied to gap 25".

The persevering reiteration of these three statements, as well as raising of the fourth unfounded statement – about the publication of SU Inventor's Certificate № 1522466 on July 15, 1989 – I am crediting with the infringement by Examiner of 35 U.S.C. 102 and with illegal grant of US Patent 6,485,409 (Voloshin et al.)

In connection with grant of US Patent 6,485,409, please, note that:

- US Patent 6,485,409 (claims 4, 5, 10) comprises invaginator, gathered on the distal part of endoscope.
- More than one year prior the date of patent application 09/646,941, according which the US Patent 6,485,409 was granted, there was printed publication WO 99/17655 of my application, which describes the endoscope with invaginator on its distal part (see PCT/LV98/00006 page 1 lines 12-14, 18-21, 31-35; page 3 lines 3-4, 17-19, 27-29; page 5, lines 7-9; page 7 lines 38-40; page 9 lines 11-13; page 10, lines 1-3; Fig. 1c, 1e, 1f).
- In accordance with 35 U.S.C. 102 my patent application 09/509,377 comprises the SU Inventor's Certificate No. 1522466 with priority from August 27, 1978, wherein is firstly described the colonoscope with invaginator, gathered on the distal part of endoscopic tube.
- Examiner at the same time has examined the patent application 09/646,941 and my application 09/509,377, as well as made the International Search according the International application No. PCT/IL00/00017, which one had a continuation in the patent application 09/646,941.
- In the course of International search of International application No. PCT/IL00/00017 Examiner opposed to it the US Patent 5,259,364 (Bob et al.), but on November 26, 2002 granted the US Patent 6,485,409. In the US Patent 6,485,409 the US Patent 5,259,364 is mentioned as a cited reference.

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